

51-4-5-24/29

AUTHOR: Tarasova, L.I. and Feofilov, P.P.

TITLE: Polarization of Luminescence and the Nature of Luminescent Centres in NaCl-Ag and KCl-Tl crystals. (Polyarizatsiya lyuminestsentsii i priroda lyuminestsiruyushchikh tsentrov v kristallakh NaCl-Ag i KCl-Tl)

PERIODICAL: Optika i Spektroskopiya, 1958, Vol IV, Nr 5. pp. 696-697 (USSR)

ABSTRACT:

The method of measurement of azimuthal dependences of polarization of luminescence in cubic crystals reported in Ref 1, makes it possible to find the orientation of anisotropic luminescence centres in the crystal lattice. The present paper deals with polarization of the visible-region luminescence of NaCl-Ag and KCl-Tl monocrystals. The exciting light was polarized by means of a Glan prism. The degree of polarization of luminescence P and its dependence on orientation of the crystals relative to the plane of polarization of the exciting light was measured using Savar polariscope. The samples were in the form of plates cut parallel to the cube edge (100). NaCl with 2 mol.% of AgCl was grown from melt by the Kyropolous method and emitted an intense blue band at 400 mμ. KCl-Tl had bright luminescence with three bands in the visible region (475, 540 and 610 mμ) and it

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Polarization of Luminescence and the Nature of Luminescent Centres in NaCl-Ag and KCl-Tl crystals.

was prepared by L.M. Shamovskiy. The results of measurements are given in Figs 1 and 2. The degree of polarization of luminescence for both crystals was found to be independent of the wavelength of the exciting light. The value of P is also independent of the emitted wavelength in the case of KCl-Tl. The azimuthal dependence of the degree of polarization of luminescence of both crystals shows that the centres responsible for their visible luminescence are partly anisotropic and they are oriented along the fourth-order symmetry axes  $C_4$  (i.e. in the direction from an anion to a cation). This result contradicts the suggestions put forward in Ref 8 that the centres in NaCl-Ag are oriented along the  $C_2$  axes. It is usually accepted that the luminescence centres in alkali-halide phosphors are activator ions which are optically isotropic. The results reported in the present paper suggest that these centres may be more complex, e.g. ion—defect groupings. There are 2 figures and 8 references, 5 of which are Soviet and 3 American.

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ASSOCIATION:

Fizicheskiy Institut Leningradskogo Gosudarstvennogo Universiteta; (Physics Institute, Leningrad State University), Gos. Opticheskiy Institut (State Optical Institute)

SUBMITTED:

October 28, 1967

1. Crystals-Luminescence-Polarization 2. Azimuth-Measurement
3. Crystals-Growth 4. Crystals-Excitation

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S/048/61/025/003/010/047  
B104/B201

24.3500 (1137, 1138, 1395)

AUTHORS: Ivanova, N.I., Tarasova, L.I., and Zhukovskiy, A.P.

TITLE: Formation of longwave luminescence bands of alkali halide phosphors

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, v. 25, no. 3, 1961, 341 - 343

TEXT: This is a reproduction of a lecture delivered at the 9th Conference on Luminescence (Crystal Phosphors), which took place in Kiyev from June 20 to 25, 1960. In the literature, opinions differ as to the nature of some luminescence bands of activated alkali halide phosphors (with one activator). Some authors believe that all luminescence bands are caused by energy transitions in one type of luminescence center. Others, however, believe that there are two different types of luminescence centers, one type for the shortwave bands and the other for the longwave ones. The shortwave luminescence bands are typical of small activator concentrations and are ascribed to the activator ions placed in the cation sites of the fundamental lattice. There are various model representations for the cen-

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Formation of longwave ...

ters of the respective longwave bands: paired centers; activator ions at the fundamental lattice defects, etc. With a view to clarifying these problems, the authors studied the polarization of luminescence of a larger number of phosphors on the basis of Na and K halides. On the strength of results obtained, they believe that the various bands of a phosphor, and also those of phosphors being almost identical, are produced by centers of a different nature. The study included also the luminescence band of phosphors with a mixed fundamental lattice, and thus, the change of the luminescence spectrum of a pure phosphor to that of another pure phosphor. Here as well, the authors arrived at the conclusion that all luminescence bands of a phosphor belong to different centers, and that the centers themselves represent the type of a molecule of a complex compound of the salt of the basis with the activator. In a discussion following the present lecture, N.N. Kristofel' states that the "dimension" of the centers has a vibrational nature and that one may therefore in a certain sense speak of a quasi-molecule in the crystal. F.D. Klement believes that the above-mentioned results can be explained also on the basis of usual representations, without having to introduce hypothetical "complexes". There are

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Formation of longwave ...

1 figure and 2 references: 1 non-Soviet-bloc. The reference to the English language publication reads as follows: Hirschlauff (Hutten) E., Pringsheim P., J. Chem., 16, 241 (1948)

ASSOCIATION: Nauchno-issledovatel'skiy fizicheskiy institut Leningradsko-gos. universiteta im. A. A. Zhdanova (Scientific Research Institute of Physics of Leningrad State University imeni A. A. Zhdanov

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L 19464-63 EWT(1)/EWP(q)/EWT(m)/EWP(B)/BDS AFFTC/ASD/IJP(C)/SSD JD  
 S/2941/63/001/000/0167/0174  
 ACCESSION NR: AT3002213

AUTHORS: Ivanova, N. I.; Tarasova, L. I.

TITLE: Luminescence spectra of alkali-halide phosphors with mixed bases

SOURCE: Optika i spektroskopiya; sbornik statey. v. 1: Lyuminestsentsiya.  
 Moscow, Izd-vo AN SSSR, 1963, 167-174

TOPIC TAGS: luminescence, spectra, bases, activators, discrete bands, luminescent centers

ABSTRACT: A detailed investigation was made of the luminescence spectra of alkaline-halide phosphors with mixed bases and 0.01 to 0.1 mol% Tl and Ag activators. The study included a series of bases with both anion and cation components. Base component concentration varied from 5 to 10 mol%. The results are given in the form of three microphotograms for KCl-KBr with various concentrations of Tl, NaCl-KCl, Tl, and NaCl-KCl, and Ag. One such figure is given in Enclosure 1. Analyzing the data in great detail, the authors conclude that the observed changes in the spectra, such as intensity, redistribution between closely

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ACCESSION NR: AT3002213

spaced bands, and the shift in the maxima of discrete bands, may be attributed to luminescent centers forming their own complexes with sufficient degree of isolation from the crystal lattice. Orig. art. has: 4 figures.

ASSOCIATION: none

SUBMITTED: 14Jun62

DATE ACQ: 19May63

ENCL: 01

SUB CODE: PH

NO REF SOV: 011

OTHER: 002

Card 2/12

TARASOVA, L. M.

USSR/Atomic and Molecular Physics - Statistical Physics, Thermodynamics, D-3

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34318

Author: Tarasova, L. M., Tarasov, V. V.

Institution: None

Title: Zero Energy of Oscillation of Chains and Layers and Specific Heat

Original Periodical: Dokl. AN SSSR, 1956, 107, No 5, 719-722

Abstract: On the basis of the "combination" laws of distribution of frequencies of the theory of specific heat of chain and layer structures (V. V. Tarasov, Dokl. AN SSSR, 1945, 46, 22; 1947, 58, 577; Zh. fiz. khimii, 1950, 24, 11) an expression is given for the zero energy of the oscillations of one-dimensional (1) and 2-dimensional (2) lattices.

$$\psi_1 = 3/4R \frac{\theta_1^2 - \theta_3^2}{e_1} + 9/8R \theta_3 \frac{\theta_3}{\theta_1} \quad (1)$$

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USSR/Atomic and Molecular Physics - Statistical Physics, Thermodynamics, D-3

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34318

Author: Tarasova, L. M., Tarasov, V. V.

Institution: None

Title: Zero Energy of Oscillation of Chains and Layers and Specific Heat

Original Periodical: Dokl. AN SSSR, 1956, 107, No 5, 719-722

Abstract:

$$\psi_2 = R \frac{\theta_2^3 - \theta_3^3}{\theta_2^2} + 9/8 R \theta_3 \left( \frac{\theta_3}{\theta_2} \right)^2 \quad (2)$$

where  $\theta_1$  and  $\theta_2$  are equal to  $h\nu_{\max}/k$ ,  $\theta_3 = h\nu_1/k$ , and the frequencies are distributed in the interval from zero to  $\nu_1$  in accordance with the 3-dimensional continuum law. It is noted that the dependence of the specific heat will obey the limiting  $T^1$  and  $T^2$  laws at  $T \leq 1/7 \theta_1$  (chain) and  $T \leq 0.1 \theta_2$  (layers) and at  $\theta_1$  (or  $\theta_2$ )  $\gg \theta_3$ . At  $\theta_1$  (or  $\theta_2$ )  $\approx \theta_3$ , the regions in which the limiting  $T^1$  or  $T^2$  laws are satisfied is practically absent and a gradual transition to  $T^3$  law is observed at  $T \leq 0.1 \theta_3$ , which also occurs in the case, for example, of the stratified structure of  $\text{MoS}_2$ .

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- 2 -

USSR/Atomic and Molecular Physics - Statistical Physics, Thermodynamics, D-3

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34318

Author: Tarasova, L. M., Tarasov, V. V.

Institution: None

Title: Zero Energy of Oscillation of Chains and Layers and Specific Heat

Original Periodical: Dokl. AN SSSR, 1956, 107, No 5, 719-722

Abstract: It is indicated that the deviation from the limiting  $T^2$  law from V. V. Tarasov's specific-heat function amounts to 1.203% at  $\theta_2/T = 9.5$  and 0.83% at  $\theta_2/T = 10$ .

GENADINNIK, I.S., kand.med.nauk; MEDUNETSKAYA, V.M.; TARASOVA, L.N.

Case of congenital craniofacial dysostosis (Crouzon's disease). Vest.  
rent. 1 rad. 34 no.4:73-75 JI-Ag '59. (MIRA 12:12)

1. Iz glaznoy kliniki (zav. - prof. A.B. Katsnel'son) Chelyabinskogo  
meditsinskogo instituta i iz rentgenovskogo otdeleniya Chelyabinskoy  
oblastnoy klinicheskoy bol'nitsy (glavnyy vrach N.S. Klyukov).  
(HYPERTELORISM case reports)

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S/080/60/033/010/016/029  
D216/D306

AUTHORS: Tarasova, L.N., Romanov, V.V., and Kubinova, N.I.

TITLE: Investigating pitting corrosion of metals under stress  
by modelling

PERIODICAL: Zhurnal prikladnoy khimii, v. 33, no. 10, 1960,  
2285 - 2290

TEXT: The influence of the following factors on the direction and strength of current of specific corrosion couples was studied by modelling: tensile stresses, degree of stress concentration and diameter of pits. The influence of stresses on the electrode potential of the cathodic and anodic areas and the degree of polarization of the anodic areas of these couples were also investigated. The aluminum alloy D-16 (2.5 % Cu, 1.66 % Mg, 0.9 % Fe, 0.62 % Mn, 0.47 % Si, remainder Al) was used for this study, since it is known that this alloy is susceptible to pitting corrosion and stress corrosion in a number of media. In order to set up stresses in the metal, the assembly of specimens was held in the grips of a device.  
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Investigating pitting corrosion ...

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D216/D306

by means of which all specimens were simultaneously subjected to uniaxial stress. The specimens were electrically insulated from the grips. In order to model stress concentrations, the width of the lower specimens was made less than that of the upper specimens which for identical loads, produced different stress levels in the upper and lower specimens. A cross section of the pit model is given. The current was measured by means of a micrometer graduated in  $\mu\text{A}$ , connected between the upper and lower specimens at the moment when current measurements were taken, after which the specimens were short-circuited through the external circuit. The electrode potential was measured by means of a glass probe of 0.12 mm internal diameter in a pit having a diameter of 1.1 mm. The measurements were carried out by the compensation method with reference to a saturated calomel half cell. The potential values were computed with reference to the normal hydrogen electrode. The measurements were carried out at the bottom and at the edges of pits. The glass probe could be moved by means of a micrometer screw. For polarization measurements, a platinum wire of 0.1 mm diameter, one

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winding of which was placed in the glass container above the pit opening, was used as the auxiliary electrode. An appropriate electrical set-up was used for supplying the required current densities. The specimens were given the same preparation prior to electrochemical measurements as that given prior to corrosion current measurements. The following relationships were investigated and are represented graphically: current-time for various stresses; potential-time for various stresses and potential-current density. The results obtained confirm the electrochemical hypothesis on the mechanism of stress corrosion of metals which postulates the local formation of specific corrosion couples which are responsible for cracking, and a characteristic influence of stress concentrations on the reactions of the corrosion couples. There are 4 figures, 1 table and 7 references: 6 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: D. K. Priest, J. Electroch. Soc., 106, 4, 358, 1959.

SUBMITTED: February 22, 1960

Card 3/3

ARTEMOV, N.M.; TARASOVA, L.N.; FILIMONOVA, A.A.

Stimulation of the pituitary-adrenal system by bee venom.

Nauch. dokl. vys. shkoly; biol. nauki no. 1:86-89 '61.

(MIRA 14:2)

1. Rekomendovana kafedroy fiziologii cheloveka i zhivotnykh  
Go'kovskogo gosudarstvennogo universiteta im. N.I. Lobachevskogo.  
(BEE VENOM—PHYSIOLOGICAL EFFECT) (PITUITARY BODY)  
(ADRENAL CORTEX)

TARASOVA, L.O.

Spore-pollen complexes from Cretaceous sediments in the  
Farab region (eastern Turkmenia). Trudy VNIGNI no.37:104-  
109 '63. (MIRA 16:8)



PETROSYANTS, M.A.; TARASOVA, L.O.

Spore-pollen complexes from Coniacian, Santonian, Campanian, and Maestrichtian sediments in eastern Turkmenia (trans-Unguz Kara Kum and middle Amur Darya Valley). Izv. AN SSSR. Ser.geol. 30 no.11:86-93 N '65. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy neftyanoy institut, Moskva. Submitted August 29, 1964.

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001754930005-7

TARASEVA, L.P.

APPROVED FOR RELEASE: 07/13/2001

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TARASOVA, L. P.

18  
4E2C  
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761  
Properties of open-hearth steel made with the use of  
oxygen L. D. S. Kozlovskii, T. M. Gavrilukina, M. P. -  
Pidel'kovskii, and L. P. Tarasova. "Stal" 17, 182-7(1957).  
Properties of basic flat steel melted in a 350-ton furnace  
with O in the flame and blown into the bath were compared  
with those of the metal made without O. No difference  
was found, provided blowing had been terminated 60 min.  $\lambda$   
before deoxidation; otherwise a metal with a lower impact  
strength was produced.  
L. D. Gavrilukina

RB fra  
MT  
UKR. Sci. Res. Inst. Metallurgy  
and Plant "Azovstal"

S/137/62/000/003/162/191  
A160/A101

12300  
AUTHORS: Zubarev, V. F.; Pereverzeva, Ye. G.; Demakova, A. V.; Tarasova, L. P.

TITLE: The effect of arsenic on the mechanical properties of welded joints of the MSt.3 (MSt.3) steel

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 6 - 7, abstract 3E39. (Sb. nauchn. tr. Zhdanovsk. metallurg. in-t, 1960, vyp. 6, 213 - 225)

TEXT: Investigations were conducted on the heterogeneity and mechanical properties of a welded joint of the MSt.3 arsenic steel. The investigations were carried out with metal cut out from different ingot parts, such as the upper, middle and lower part at a concentration of 0.14 - 0.26 % As and 0.14 - 0.22 % C. The tests yielded the following results: (1) The built-up metal of the welded joint considerably differs from the base metal as to its chemical composition. The content of Mn and Si in the built-up metal of the St3 killed steel increases in relation to the base metal 1.5 - 2 times, the content of C and As decreases 1.5 - 2 times. (2) The content of Mn and Si in the built-up metal and in the killed

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and rimmed steels corresponds to the equilibrium concentrations between the liquid flux and metal at weld-bath temperatures of 2000 and 1575°C. (3) A liquation of impurities is appearing in the base and built-up Me along the length of the ingot bloom. The upper, and to a lesser degree the middle section of the ingot bloom are enriched with S, P, C and As. (4) An effect of the As on the macrostructure is not detected, and an effect on the macrohardness of the main zones of the welded joint is clearly detected: an increase in the content of As to 0.01 % causes an increase of  $R_B$  by 1.0. An increase of C would similarly affect the hardness. (5) The mechanical properties along the length of the ingot bloom are heterogenous. When passing from the upper to the bottom part of the ingot, the strength properties decrease, the plasticity properties and  $a_k$  increase. (6) An increase of the content C and As improve the strength properties and decrease the plasticity properties. An increase of the C content by 0.01 % increases - in the killed and rimmed steels - the  $\sigma_B$  by 0.7 kg/mm<sup>2</sup> and decreases  $\delta$  by 1.2 %. The effect of As is 2 times weaker. (7) When containing 0.14 - 0.26 % As, the  $a_k$  of a welded joint of the St3 arsenic steel has a high level (9 - 30 kgm/cm<sup>2</sup>), i.e., a higher one than in a St3 non-arsenic steel. (8) The Me of a welded joint

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of the MSt.3 steel with 0.26 % As possesses satisfactory mechanical properties.

V. Tarisova

[Abstracter's note: Complete translation]

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S/133/60/000/012/011/015  
A054/A027

18.1110

AUTHORS: Demakova, A.V., Tarasova, L.P., and Baranova, Z.I.

TITLE: Influence of Arsenic on the Structure and Properties of Rolled Heavy Sections Made of Cr. 3cn (St. 3 sp) Structural Carbon Steel

PERIODICAL: Stal', 1960, No. 12, pp. 1127-1130

TEXT: There are no fast rules for the permissible arsenic content of steel and the applicability of arsenic containing steels. As the Kerchensk Metallurgical Plant and "Azovstal'" receive iron ores from the Kerchensk deposit, it was found necessary to extend the investigations into this field, mainly to test the possibilities of using high-arsenic-content metal for rolling heavy sections (No. 30 channel bars). Five test meltings were carried out with St. 3 sp steel in a 350 ton furnace, two of them having the maximum As-content tolerated by the plant (up to 0.15%) and C-contents between 0.15-0.21%, three meltings were given a higher As-content (0.17 and 0.26%) and their C-contents varied from 0.17 to 0.19% (see Table 1). In these three meltings the As-content was increased by introducing into the furnace after charging a box with 33% As-content ferro-arsenicum. The metal was deoxidized in the furnace with ferromanganese; after 40 minutes about 50-60% of the melt with an As-content of 0.17% was poured. 320 kg ferro-arsenicum were then added again

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Influence of Arsenic on the Structure and Properties of Rolled Heavy Sections  
Made of Cr. 3cr (St. 3 sp) Structural Carbon Steel

in the charge and after 5-8 minutes steel with an As-content of 0.26% was poured in another ladle. During pouring the metal was further deoxidized by ferrosilicium and aluminum. Blooms were rolled, then channel bars (No. 30, with a bar thickness of 11.5 mm) in such a way that the bars were made from all parts (top, middle, bottom) of the blooms. The samples were tested for chemical homogeneity, macro and microstructure, mechanical properties and impurities. As regards chemical composition, it was found that along the section in the upper part and, to a lesser extent, in the middle, there was more C and As (0.01-0.03%), Ph and S (0.002-0.006%) as compared with the bottom part. Examination of the macrostructure investigated on templates and mechanical properties showed an As-content as high as 0.26% had no adverse effect on the metal. On the contrary, the strength of high As-steel was slightly greater than of those with a 0.17% As-content. Tenacity was examined in the temperature range between + 20 and - 60°C and the tests proved that this property had not been changed noticeably by the higher As-content; while higher tenacity could be observed in samples made from the bottom part of the rolled section compared with samples made from the upper portion. The micro-

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Influence of Arsenic on the Structure and Properties of Rolled Heavy Sections  
Made of Ст. 3сп (St. 3 sp) Structural Carbon Steel

structure of the channel bar displayed a ferrite-perlite character with more ferrite. On every tested channel bar ferrite streaks could be observed after pickling with a 4% alcohol solution of  $\text{HNO}_3$  (Fig.3). These streaks are caused by the irregular distribution of arsenic (investigated with the Oberhoffer-reagent). Streak formation was more intense in the head of the channel bar than in the bottom part. The aggregation of arsenic in some parts of the structure can be clearly indicated by a 10% alcoholic solution of iodine during pickling; the light streaks become darker under the effect of the iodine reagent indicating a higher As-content in these parts. The investigated channel bars from St. 3 sp steel, having an As-content between 0.14 and 0.26% satisfied the requirements of ГОСТ (GOST) 380-57, they display even better qualities than required by this standard. In the tests N.K. Ipatov, S.L. Mil'ner, P.D. Baranets, and L. Agamalova and L. Matveyeva, Undergraduate (Degree) Students took part. There are 5 figures and 2 tables.

ASSOCIATION: Zhdanovskiy metallurgicheskiy institut (Zhdanovsk Metallurgical Institute) Zavod "Azovstal'" (Azovstal' Plant).

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SVIRIDENKO, F.F., inzh.; POPOVA, A.N., inzh.; FRADINA, M.G., inzh.;  
CHERNOVA, A.V., inzh.; TARASOVA, L.P., inzh.

Experimental production of 10-ton rail ingots. Stal' 20  
no.8:699-701 Ag '60. (MIRA 13:7)

1. Zavod "Azovstal'."  
(Steel ingots)

BOL'SHAKOV, L.A., kand.tekhn.nauk; BUL'SKIY, M.T., inzh.; TURCHENKOVA, Ye.K.,  
inzh.; YEGNUS, R.M., inzh.; SVIRIDENKO, F.F., inzh.; TARASOVA, L.P.,  
inzh.; SLEPKANEV, P.H., inzh.; GAVRIKOV, V.Z., inzh.

Efficient design of large rail ingot molds. Stal' 20 no.9:793-797  
S '60; (MIRA 13:9)

1. Zavod "Azovstal'" i Zhdanovskiy metallurgicheskiy institut.  
(Ingot molds)

DEMAKOVA, A.V.; RYABUSHKIN, Yu.P.; TARASOVA, L.P.; TROFIKOVA, K.G.; PEREVERZEVA, Ye.G.

Structure of the metal in welded joints in MSt.3 arsenical steel.  
Avtom. svar. 14 no.5:11-19 My '61. (MIRA 14:5)

1. Zhdanovskiy metallurgicheskiy institut (for Demakova, Ryabushkin).
2. Zhdanovskiy zavod "Azovstal'" (for Tarasova). 3. Zhdanovskiy zavod tyazhelogo mashinostroyeniya (for Trofimova, Pereverzeva).  
(Steel--Welding) (Welding--Testing)

TARASOVA, L. P.

S/133/61/000/004/002/015  
A054/A127

AUTHORS: Kazantsev, I. G., Professor; Lukashov, G. G., Engineer;  
Bul'skiy, M. T., Engineer; Tarasova, L. P., Engineer, and  
Sapelkin, N. F., Engineer

TITLE: The most important properties of arsenic containing MSt.3kp  
(MSt.3 kp) type rimming steel

21-  
PERIODICAL: Stal' no. 4, 1961, 346 - 350

TEXT: Steel beams, channels, hinges and sheets used in the building industry must come up to the following requirements of GOST (GOST) 380-50:  $\sigma_B = 38$  kg/sq mm;  $\sigma_S = 24$  kg/sq mm;  $\delta_{10} = 25\%$ . Since 1954 products for the building industry have been manufactured in the "Azovstal'" plant of MSt.3kp rimming steel with an arsenic content of 0.13% produced from Kerch' ore. The mechanical properties of the arsenic-containing steel of Azovstal' were tested together with three heats of non-arsenic containing MSt.3kp steel processed in the Yenakiyeo plant from Krivoyrog ores. The composition of the heats is given in Table 1. From the test castings no. 30 channels, 2 meters in length were produced (from the top, medium and bottom part of

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the ingot). Samples were made from the steel channels to test the tensile strength, notch toughness as well as to carry out endurance and brittle fracture tests. The tensile strength values (Table 2) show that for a practically identical composition the arsenic-containing steel displays 2 - 4% higher values than arsenic-free steel, whereas both types have the same values for relative elongation. For notch toughness with Menazhe (Menager) type samples - 45 longitudinal and 45 transversal from each heat - the following average values were obtained:

Test-temperature, °C	+20	0	-20	-40	-60
As-containing					
longitudinal samples	14.0	10.8	8.6	3.7	0.30
transversal "	8.4	6.7	5.4	3.0	0.32
As-free					
longitudinal samples	12.3	9.4	5.8	0.80	0.30
transversal "	7.6	4.9	3.6	0.68	0.28

Thus, notch toughness is higher for arsenic containing steels at each temperature tested. For endurance tests special samples were made. Sheets 11.5 mm thick were cut from the no. 30 channels of both kinds of steel and

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polished on magnetic sheet to  $10 \text{ mm} \pm 0.02 \text{ mm}$ . Next arsenic containing and non-containing sheets were welded together (Fig. 1). In this way the two different steel types could be tested simultaneously and under exactly identical conditions. 288 welded samples were tested in all: 72 longitudinal samples, polished on 3 sides, 72 of the same kind, but polished on 4 sides, while from arsenic non-containing steel the same number of samples in the same assortment were investigated. It was found that under symmetrical oscillating bending load, with a stress in the external fibers of the material between 13.4 and 8.5 kg/sq mm (measured at every 0.7 kg/sq mm) most fractures occurred in non-arsenic samples (169 of 240 or 70%). The limit of endurance in arsenic-containing and non-containing steel samples established under symmetrical oscillating bending load with a number of cycles of  $10^7$ , from 19 to 20 kg/sq mm decreases in the proximity of the welding seams with a bead, to 8.5 - 9.2 kg/sq mm. The tests proved that samples containing arsenic display a greater bending resistance than arsenic-free steels and are thus more suitable for welded building constructions than the latter. Tests on brittle fracturing of both types of steel were carried out at +20, -20 and -60°C on samples as given in Figure 4 and consisting of 50% As-containing and 50% As-free steel. 78% of the fractures occurred in non-arsenic

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The most important properties of...

S/133/61/000/004/008/015  
A054/A127

steel samples. No brittle fracture could be observed in the proximity of the welding seam, in either kind of samples at low temperatures, proving that MSt.3kp steels are suitable for electrowelding. It was concluded that the MSt.3kp steel made of Kerchensk ore, with electrowelded seams and a 0.13% As content is superior to the same branch of steel not containing As, with regard to tensile strength, notch toughness, endurance and brittle fracture. There are 5 figures, 3 tables and 3 references: 2 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Zhdanovskiy metallurgicheskiy institut (Zhdanov Metallurgical Institute) and zavod "Azovstal'" (Azovstal' Plant).

Card 4/6



LEPORSKIY, V.V., inzh.; PETROV, S.S., inzh.; BUL'SKIY, M.T., inzh.  
[deceased]; ALIMOV, A.G., inzh.; BELOGOLOVSKIY, M.Sh., inzh.;  
TARASOVA, L.P., inzh.; KALASHNIKOV, A.G., inzh.

Production of medium-carbon, capped steel. Stal' 23 no.8:696-699  
Ag '63. (MIRA 16:9)

1. Metallurgicheskiy zavod "Azovstal'".  
(Steel--Metallurgy)

TARASOVA, L.P., inzh.; KALASHNIKOV, A.G., inzh.; DOLINENKO, O.V., inzh.;  
NAZARENKO, Ye.T., inzh.; BUL'SKIY, M.T., inzh. [deceased];  
SVIRIDENKO, F.F., inzh.; Prinsipali uchastiye: LAPINA, A.M., inzh.;  
KORNIYENKO, D.I., inzh.

Nonmetallic inclusions in rail steel. Stal' 23 no.8:738-740

Ag '63.

(MIRA 16:9)

(Railroads--Rails) (Steel--Inclusions)

KAZANTSEV, I.G., prof.; LUKASHOV, G.G., inzh.; GORBANEV, Ya.S., inzh.; TARASOVA, L.P., inzh.; SAPELKIN, N.F., inzh.

Strength of welded joints in arsenic containing structural steel produced at the "Azovstal'" Plant. Stal' 23 no.12:1112-1114. D '63.

(MIRA 17:2)

1. Zhdanovskiy metallurgicheskiy institut i metallurgicheskiy zavod "Azovstal'".

KABANISEV, V.G., KRASHENININ, A.P., KARABOVA, I.A.

Mechanical properties of structural steel in the form of phosphorus  
must iron in an oxygen-bromine environment. Dokl. Akad. Nauk SSSR,  
chern. met. 7 no.12:1335-36, 1964. (MIRA 1964)

1. (Izmeneniye metallurgicheskoy struktury).

ZANNES, A.N.; ROZMETAYLO, V.M.; TARASOVA, L.P.; SAFELKINA, O.R.

Investigating the metal structure of rails hardened along their  
full length. Met. i gornorud. prom. no.2:40-41 Mr-Ap '65.

(MIRA 18:5)

ALIMOV, A.G. inzh.; KARPENKO, L.G., inzh.; TARASOVA, L.P., inzh.;  
TIKHOMIROVA, K.A., inzh.; BERILOV, N.T., inzh.; YUDIN, V F.,  
inzh.; SOBINOVA, L.I., inzh.; TRUSKO, A.A., inzh.

Rapid bottom pouring of killed steel. Stal' 25 no.3:  
230-231 Mr '65. (MIRA 18:4)

DERFEL', A.G.; KRAVTSOVA, I.P.; DYUBIN, N.P.; SVIRIDENKO, F.F.; POPOVA, A.N.;  
DOIINENKO, O.V.; SHAROV, B.A.; Prinimali uchastiye: DYUBINA, A.V.;  
TARASOVA, L.P.; LESENKO, I.I.; LEVCHENKO, N.D.; BONDARENKO, A.V.

Using ferrotitanium for the deoxidation of rail steel and  
its properties. Sbor. trud. UNIIM no.11:365-378 '65.  
(MIRA 18:11)

TARASOVA, L.P.

I.I. Mechnikov's experiments in the study of cholera. Zhur. mikrobiol.,  
epid. i immun. 42 no. 2: 145-149 F '65. (MIRA 18:6)

1. Moskovskiy institut vaktsin i syvorotok imeni Mechnikova.



166T65

TARASOVA, L. S.

USSR/Metals - Analysis, Cast Iron Jul 50

"Electrolytic Determination of Small Quantities of Copper in Antifriction Cast Irons," A. V. Mitroshina, L. S. Tarasova, Dnepropetrovsk Plant for Metallurgical Equipment

"Zavod Lab" Vol XVI, No 7, pp 874-875

Introduces method for deposition of copper by internal electrolysis without using any hydrazine sulfate. Demonstrates application of method to analysis of antifriction cast irons. Discusses experiments for deposition of copper from

166T65

USSR/Metals - Analysis, Cast Iron Jul 50  
(Contd)

solution of various acidities and suggests optimum acidity of electrolyte. Used iron anode in experiments.

166T65

TARASOVA, L. S.

USSR/Metals - Steel, Analysis

Dec 50

"Determination of Oxygen in Steel," R. S. Aksel'-  
rod, L. S. Tarasova, Dnepropetrovsk Plant for  
Metallurgical Equipment

"Zavod Lab" No 12, pp 1494, 1495

Suggests better method for sampling molten steel  
and describes detn of oxygen in steel by improved  
Heurty method. Roasted residue was fused with 2-3  
g potassium bisulfate and, after lixiviation and  
electrolysis of soln with Hg cathode, detn was  
photocolorimetric using color reaction with aluminon.

182T93

TROITSKIY, G.V.; TARASOVA, L.S.

Characteristics of blood proteins in combination with carotene, vitamin A, vitamin D<sub>2</sub>, and cholesterol. Biokhimiia 20 no.1:19-30 Ja-F '55. (MLRA 8:5)

1. Kafedra biologicheskoy khimii Krymskogo meditsinskogo instituta, Simferopol'.

(BLOOD PROTEINS,

complexes with carotene, cholesterol & vitamins A & D<sub>2</sub>)

(CAROTENE, in blood,

complexes with proteins)

(CHOLESTEROL, in blood,

complexes with proteins)

(VITAMIN A, in blood,

complexes with proteins)

(VITAMIN D, in blood,

D<sub>2</sub>, complexes with proteins)

Tarasova, L.S.

*Med* ✓ The distribution of cholesterol among the protein fractions of blood serum. L. S. Tarasova and G. V. Troitskii (Crimean Med. Inst., Simferopol). *Ukrain. Biokhim. Zhur.* 28, 177-81 (in Russian, 181-2) (1956).—Studies were made of the following: blood serum of normal humans, serum of human placenta, rabbit, hog, cattle (bull), dog, and guinea pig blood serum. Salting out fractionation was used. Cholesterol was found in all protein fractions in considerable amts,  $\alpha$ - and  $\beta$ -globulins (except those of rabbits) proved especially rich in cholesterol (7-10 times as high as in other protein fractions). Results present strong evidence for the existence of a union between proteins and cholesterol. Since rabbits are susceptible to the development of atherosclerosis, T. and T. suggest that the ability of  $\beta$ -globulin to become cholesterol satd. may be regarded as a factor of importance in the pathogenesis of this disease. B. S. L.

2/  
Chin Biochem,

TARASOVA L S

TROITSKIY, G.V.; TARASOVA, L.S.

Effect of substances, increasing the  $\alpha$ - and  $\beta$ -globulin content of the blood, on the development of alimentary hypercholesteremia and atherosclerosis [with summary in English]. Vop.med.khim. 2 no.6: 428-437 N-D '56. (MLRA 10:3)

1. Kafedra biologicheskoy khimii Krymskogo meditsinskogo instituta imeni I.V.Stalina, Simferopol'.

(ALDEHYDES, eff.

$\alpha$  - &  $\beta$ -globulin increasing aldehydes, on exper. hypercholesterinemia & atherosclerosis)

(VITAMIN K, eff.

$\alpha$  - &  $\beta$ -globulin increasing vitamin K, on exper. atherosclerosis & hypercholesterinemia)

(ARTERIOSCLEROSIS, exper.

eff. of  $\alpha$ - &  $\beta$ -globulin increasing aldehydes & vitamin K in dogs)

(CHOLESTEROL, in blood

excess, exper., eff. of  $\alpha$  - &  $\beta$ -globulin increasing aldehyde & vitamin K)

TARASOVA, L. S.

TARASOVA, L. S.

Distribution of cholesterol in protein fractions of blood serum in patients having atherosclerosis [with summary in English]. Vop.med.khim. 3 no.3:177-182 My-Je '57. (MLRA 10:8)

1. Kafedra biokhimii Krymskogo meditsinskogo instituta, Simferopol'  
(CHOLESTEROL, in blood  
in arteriosclerosis, distribution in blood protein  
fractions (Rus))  
(ARTERIOSCLEROSIS, blood in  
cholesterol distribution in blood protein fractions (Rus))

SHAKHNAZAROV, A.B., prof.; TROITSKIY, G.V., prof.; TARASOVA, L.S., dots.;  
ZAYTSEVA, T.Kh., kand.med. nauk (Simferopol')

Blood protein fractions in atherosclerosis. Vrach.delo no.1:87 '59.  
(MIRA 12:4)

1. Kafedra diagnostiki vnutrennikh bolezney (zav. - prof. A.B. Sha-  
khnazarov) i kafedra biokhimii (zav. - prof. G.V. Troitskiy) Krym-  
skogo meditsinskogo instituta.  
(BLOOD PROTEINS) (ATHEROSCLEROSIS)

TARASOVA, L.S.; TROITSKIY, G.V.

Influence of vitamin B on the development of alimentary hyper-  
cholesterinemia and atherosclerosis. Vop.med.khim. 6 no.1:62-72  
Ja-F '60. (MIRA 13:5)

1. Chair of Biochemistry of the Crimena Medical Institute, Simfero-  
pol. ~~SECRET~~

(ATHERIOSCLEROSIS exper.)

(CHOLESTEROL)

(VITAMIN B pharmacol.)



TARASOVA, L.S. (U.S.S.R)

"Interrelation between Cholesterol, Plasma Proteins and Certain  
Isoprenoids in Experimental Hyper-cholesterinaemia."

Report presented at the 5th Int'l. Biochemistry Congress,  
Moscow, 10-16 Aug 1961.

TARASOVA, L.S.

Effect of citral on the content of glycoproteins and lipoproteins during the development of experimental atherosclerosis. Vop. med. khim. 7 no.6:585-592 N-D '61. (MIRA 15:3)

1. Chair of Biochemistry of the Crimean Medical Institute, Simferopol.

(ARTERIOSCLEROSIS)	(CITRAL)
(GLYCOPROTEINS)	(LIPOPROTEINS)

TARASOVA, L.S.

Regeneration of proteins following loss of blood in conditions  
of experimental hypercholesterinemia. Vop. med. ~~biol.~~ 8 no.5:  
504-513 S-0'62 (MIRA 17:4)

1. Kafedra biokhimii Krymskogo meditsinskogo instituta, Sim-  
feropol'.

ACC NR: AT7004929

SOURCE CODE: UR/0000/66/000/000/0096/0100

AUTHOR: Zholkover, T. D. (Moscow); Perov, V. I. (Moscow); Tarasova, L. S.

ORG: none

TITLE: Effect of automatic monitoring and switchover devices on reliability of systems with redundancy

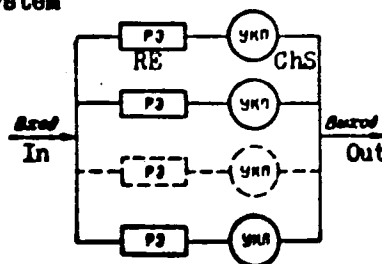
SOURCE: Vses. konf. po avtomatich. kontrol i metodam elektrich. izmereniy, 6th, 1964. Avtomatich. kontrol i metody elektrich. izmereniy; tr. konf., t. I: Teoriya izmerit. info. sistem (Automatic control and electrical measuring techniques; transactions of the conference, v. 1: Theory of measuring information systems). Novosibirsk, Izd-vo Nauka, 1966, 96-100

TOPIC TAGS: reliability, redundancy, automatic control system

ABSTRACT: Systems with active parallel redundancy in which reserve elements RE (see figure) are controlled by check-and-switchover ChS units is considered. Reliability of one branch under  $m$ -th load conditions is given by:  $P_m = P_m^* P_{mk}$ , where  $P_m^*$  - reliability

of RE under  $m$ -th conditions;  $P_{mk}$  - reliability of ChS under  $m$ -th conditions. A set of differential equations describes the

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ACC NR: AT7004929

reliability conditions in terms of failure rates and  $r_{\Sigma}$  (probability that a branch failure is accompanied by elimination or self-elimination of RE). As a result, the probability of successful operation of the entire system is determined. These particular cases are considered: (1) Failure rates are constant in time (exponential law of distribution of reliable-operation time); (2) A definite ratio of failure rates of RE and ChS; (3) Reliability characteristics of RE and ChS do not change when the number of branches changes; starting from a certain value of the redundancy rate, the probability of successful operation decreases. When the probability of RE self-elimination is sufficiently high, ChS devices are superfluous. Orig. art has: 1 figure and 30 formulas.

SUB CODE: 09, 14 / SUBM DATE: none / ORIG REF: 004

Card 2/2

TARASOVA, L. V.

Zaitsev, A. A. and Tarasova, L. V. (Physics) Effects of contraction of a smoldering discharge in the absence of external fields. P. 61

Chair of Electron Optics and Oscillography  
June 24, 1950

SO: Herald of the Moscow University. Series on Physics-Mathematics and Natural Sciences, No. 3, No. 5, 1951

TARASOVA, L.V.

517 525 - 421 3 015.5

✓ 0671. PRESENT-DAY IDEAS CONCERNING THE MECHANISM OF ELECTRICAL BREAKDOWN IN HIGH VACUUM.

L.V. Tarasova

Uspekhi fiz. Nauk, Vol. 58, No. 2, 321-46 (1956). In Russian. *Phy<sup>s</sup>*

Review of experimental work on the effect of different metals as electrodes, mechanism of tearing out particles from an electrode, effects with small interelectrode distance and moderately high voltage, effects with large separation and high applied voltage. The author concludes it is not possible to give a satisfactory general account of phenomena. 54 refs.

C.R.S. Manders

TARASOVA, L. V.

in collection of articles--  
Effect of Ionizing Radiation (~~Cont.~~) on Inorganic and Organic Systems, Moscow, Izd-vo  
AN SSSR, 1958, 416pp (most works a continuation of Sb rabot po radiat, khim, 1955)  
Mikhaylov, B.M., Tarasova, L.V., Bogdanov, V.S. Radiochemical Conversion  
of Organic Substances. Part 1. Conversion of Gaseous Aliphatic Hydro-  
carbons Due to Fast Electrons 218

Methane, ethane, propane, and n-butane were irradiated with a 90 Kev  
electron beam. Dehydrocondensation is the basic process of radiolysis.  
Liquid hydrocarbons constitute 50 percent of the conversion products  
of methane, and 70 - 90 percent of the conversion products of ethane,  
propane, and n-butane. There are 3 tables, 2 figures, and 7 English  
references.

Mikhaylov, B.M., Kimova, M.Ye., Bogdanov, V.S. Radiochemical Conversion  
of Organic Substances. Part 2. Oxidation of Methane with Oxygen Due to  
Fast Electrons 223

A mixture of methane and oxygen ( $\text{CH}_4 : \text{O}_2 = 4 : 1$  and  $1 : 1$ )  
was irradiated with fast electrons.  $\text{CO}$ ,  $\text{CO}_2$ ,  $\text{H}_2$ , and  $\text{H}_2\text{O}$  were found  
in the reaction products. About 50 percent of the methane was con-  
verted to the liquid phase. The rate of oxidation increases with  
methane content (50 - 80%), and with increased pressure (190 - 760 mm  
Hg). The mechanism of the reaction is regarded as radical.

~~Case 18/31~~



SOV/120-59-4-19/50

AUTHORS: Kalinin, V. G., Tarasova, L. V.

TITLE: An Air-Filled Gas-Discharge Tube With a Thermal Primer

PERIODICAL: Pribery i tekhnika eksperimenta, 1959, Nr 4, pp 90-93  
(USSR)

ABSTRACT: The device described is based on the effect discovered by Broadbent and Wood (Refs 4, 5). The tube is referred to as the "thermotron". It consists of two steel rod electrodes having a diameter of 3-4 mm (see Fig 1) which are mounted inside a tube made of organic glass; the tube has a diameter of 30 mm and a height of 50 mm. The priming electrode 4 (see the figure) consists of one or two nickel or nichrome wires having a diameter of 0.1 mm and a length of 9 mm; these are welded to two nickel input terminals. The glass tube contains a number of holes in its walls in order to enable the air from the atmosphere to fill the discharge gap. The investigation of the characteristics of the tube was carried out as follows. The high-voltage capacitor  $C_1$  (see Fig 1) was connected in the anode circuit of the tube via a large resistance  $R_3$ . The resistance  $R$  in the anode circuit served to limit the current during the discharge. The priming of the tube was effected by closing the key  $K_2$  so that the

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SOV/120-59-4-19/50

An Air-Filled Gas-Discharge Tube With a Thermal Primer

capacitance  $C_2$  was discharged through the wires of the priming electrode. The temperature of the primer could thus be raised to 400 to 700°C and a breakdown was produced across the discharge gap. The priming network was grounded via the resistance  $R_1$  which served to limit the current during the discharge. The tube could be operated at anode voltages from 3 to 10 kV, the discharge currents being as high as 100 kA. The voltage of the priming circuit was 100 to 250 V and the energy necessary for the priming was 0.2 to 1.2 J. The delay time between the priming and the discharge was 20 to 200  $\mu$ s, and the permissible number of discharges was up to 200. The most important characteristics of the thermotron are shown in Figs 2, 3 and 4. Fig 2 shows the breakdown margin of the tube as a function of the priming energy; the breakdown margin is defined as  $\theta = (U_n - U_p)/U_p$ , where  $U_p$  is the

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SOV/120-59-4-19/50

An Air-Filled Gas-Discharge Tube With a Thermal Primer

breakdown voltage of the main gap without priming and  $U_p$  is the breakdown voltage when primed. The delay time, as a function of the priming energy, is illustrated in Fig 3. The dependence of the delay time on the breakdown margin for a constant priming energy is illustrated in Fig 4. There are 4 figures, 1 table and 5 references, of which 3 are English and 2 Soviet.

SUBMITTED: May 13, 1958.

Card 3/3

46702

24,2120

### AUTHORS:

Granovskiy, V.L., Luk'yanov, S.Yu., Spivak, G.Y. and  
Mironenko, I.G.  
SOV/109-4-8-22/33

**ATTN:**

Report on the Second All-Union Conference on Gas Electronics

PERIODICAL: Radiotekhnika i elektronika, 1959, Vol 4, Nr 3, pp 1339 - 1358 (USSR)

**ABSTRACT:** The conference was organized by the Ac-Sci USSR, the Ministry of Higher Education and Moscow State University. T.B. Fogel'son - "Methods of Reducing the Energy Lost in the Formation of Breakdowns".

U.S. Fogelson - "Methods of Reducing the Energy Cost in Formation of a Breakdown".  
L.I. Pivovarov and V.Y. Gordiyenko - "Microdischarges and  
Pre-breakdown Currents Between Metal Electrodes in High  
Vacuum".

V.A. Simonov and G.P. Katukov - "Investigation of the Processes of Initiation and Development of a High-voltage Discharge in Vacuum".

Discharge in Vacuum". The Character-  
istics of Ignition in High-vacuum in Magnetic Fields".  
L.V. Tarasov et al. dealt with the transfer of the elect-

material during the pre-breakdown stage in vacuum.  
M.B. Rozanov et al. - The Motion of Micro-particles of  
Negative Electric Breakdown in Vacuum.

The third section dealt with the problems of electric sparks, corona and theoretical applications. It was presided over by I.S. Stekol'nikov. The following paper were read:

were read:  
V.Y. Lantsov et al. - "Probe Investigation of the a.c.  
Corona Fields".  
Supplementary Processes in the Ionization  
of Corona Fields".

Corona Virus - "Elementary Processes in the Ionization of Corona Discharge"  
G.N. Alexandrov - "Zone of Corona-type Conductors at Atmospheric Pressures"  
V.A. Puzoskin - "Appearance of a Corona Discharge in Hydrogen and Nitrogen"

Hydrogen and Nitrogen" - "Some Properties of the Corona P.N. Chistyakov et al. - "Some Properties of the Corona Discharge in Hydrogen i/Coaxial, Cylindrical System". - "Appearance of Discharge - A.S. Soboleva and B.N. Klyaznel'd - "Measure of

A.S. Sobolova and  
B.N. Alifanov  
Phenomena Between a Point and a Plane at Gas Pressures of  
 $10^{-3} - 1.0 \text{ mm Hg}$ . - Methods of Unipolar Ionization of  
v. v. Khramov et al. - Methods of Unipolar Ionization of

Ya.Yu. Ryssak et al. - "Methods of Unipolar Ionization of Air By Means of Aerosolizers" (see p 1355 of the Journal).  
M.P. Vanyukov et al. - "Time Spectra of the Radiation of a Spark Discharge in Inert Gases" (see p 1284 of the

a Spark Discharge in Inert Gases. *High*  
*Journal*).  
M.P. Vanyukov and A.A. Mak - "Production of High  
Temperatures by Means of Spark Discharges".  
Influence of the Magnetic Field of

V.A. Perkratin - "Influence of the Magnetic Field of the Electric Discharge on the Dividing Surface of Two Media"  
I.S. Stokol'nikov - "New Data from the Study of Long

M.Y. Syanov - "Properties of the Breakdown of Compressed Air in a Comparatively Uniform Field in the Presence of Localised Non-uniformities".

Localized Non-uniformities".  
A.A. Vorobyev et al. - "Pulse and Oscillographic  
Techniques for the Measurement of the Discharge Lag  
in Dielectrics" (see p 1357 of the journal).

*A paper by B.N. Zolotarev dealt with the problem of the basic theory of the electric erosion* (see p 1390 of the journal).

The fourth section was presided over by S. Yu. Luk'yanov and was concerned with the non-stationary and low-frequency discharges. The following papers were read: V. G. Mekrazhevich and A. A. Labud - "The Nature of the

I.G. Makrabovich and A.A. Labud - "The Nature of the Current Interruption During the Electric Explosion of a Metal Wire".  
V.A. Simonov - "Propagation of Plasma From Local Pulse

V.A. Slesnov - "Propagation of an Electro-  
magnetic Wave in a Plasma"  
G.G. Timofeyev et al. - "Observation of an Electro-  
dynamically Compressed Arc By Means of an Electron-optical  
System"

M.S. Ioffe and Ye.Ye. Yushmanov - "Investigation of the Radial Electric Field in an Ion Magnetron".  
V.A. Balazs and M.K. Ruzinovskiy - "Experiments with an  
Dynamic Converter".

V.A. Belkayev and M.K. Buzanovskiy - "Experiments with an Electron Model of a System with Magnetic Samples".  
A.M. Andrianov et al. "Distribution of Magnetic and Electric Fields in Powerful Pulse Discharges".

G.N. Harding (England) - "Spectroscopic Determination of the Plasma Temperature in the "Zeta" Equipment" (see p 1326 of the journal).

The pair by Harding aroused a lot of interest and Academician L.A. Artamonovich expressed the opinion that the electrons and ion temperatures in the "Zeta" should be of the same order. Instead of referring to Harding (see p. 130 of the journal).

be of the same order; instead of the electron temperature being an order than that of the ion.

100

Card 7/19 G.G. Timofeyev et al. - "Observation of an Electron-Optical Arc By Means of an Electron-Optical

S/109/60/005/04/017/028  
E140/E435

**AUTHORS:** Razin, A.A., Tarasova, L.V. and Tsukerman, V.A.  
**TITLE:** Cine Microphotographs of Electrodes in the Pre-Breakdown Phase and in Electric Breakdown in High Vacuum <sup>1</sup>  
**PERIODICAL:** Radiotekhnika i elektronika, 1960, Vol 5, Nr 4, pp 666-671 (USSR)  
**ABSTRACT:** This paper was presented at the 2nd All-Union Conference on Gas Electronics, October 1958.

Using microphotographs, it is shown that electrode surfaces in high vacuum change their microrelief both in the breakdown and in the pre-breakdown phase. A series of experiments was run with high contamination of the electrodes by deposition of oil in prolonged pumping by an oil diffusion pump without freezing-out the oil. The photographs clearly show the formation of projections in the oil film under the action of a strong electric field. When the electrodes are cleaned of oil, the formation of metal points and their rupture is observed accompanied by breakdown of the gap. Acknowledgements are expressed to L.N.Vorob'yev for her assistance with the experiments and illustration.

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S/109/60/005/04/017/028  
E140/E435

Cine Microphotographs of Electrodes in the Pre-Breakdown Phase and  
in Electric Breakdown in High Vacuum

There are 6 figures and 5 references, 3 of which are  
Soviet and 2 English.

SUBMITTED: July 30, 1959

Card 2/2



KUSHNIR, Yu.M.; KABANOV, A.N.; KRUTYAKOVA, L.N.; TARASOVA, L.V.

Elastic and inelastic scattering of reflected electrons. Izv.  
AN SSSR. Ser. fiz. 27 no.9:1235-1238 9 '63. (MIRA 16:9)  
(Electrons--Scattering)

BR

ACCESSION NR: AP4028955

5/0057/64/034/004/0666/0675

AUTHOR: Tarasova, L.V.; Kalinin, V.G.

TITLE: Investigation of high vacuum electric breakdown

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.4, 1964, 666-675

TOPIC TAGS: electric breakdown, high vacuum breakdown, pulsed vacuum breakdown, vacuum breakdown mechanism

ABSTRACT: High vacuum electric breakdown was investigated under a variety of conditions. Three spark chambers were employed: one was operated at  $10^{-5}$  mm Hg with no cold trap to remove the oil vapor; one was operated at  $4 \times 10^{-6}$  mm Hg with a liquid nitrogen trap; and one was brought to  $3 \times 10^{-9}$  mm Hg with a tantalum ion sorption pump. Four high voltage sources were used: a dc supply generating potentials up to 200 kV, a pulse generator producing up to 500 kV pulses with  $8 \times 10^{-8}$  sec rise time and  $9 \times 10^{-5}$  sec duration, a pulse generator producing approximately sinusoidal pulses up to 180 kV with  $10^{-6}$  sec duration, and a generator producing pulses with  $2 \times 10^{-8}$  sec rise time and  $10^{-7}$  sec duration. Steel, silver, copper, and tungsten electrodes were investigated; both electrodes were always of the same metal. Elec-

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ACCESSION NR: AP4028955

trode configurations investigated were plane to plane, point to plane (both positive and negative), and sphere to sphere. The dc breakdown potential usually increased during the course of several discharges, sometimes by as much as a factor of four. This increase was presumably due to a cleansing effect of the discharge. Pump oil vapor was not involved, for the effect was the same with and without the cold trap. This cleansing effect was present, but much less marked, even in the ultrahigh vacuum. The ultimate breakdown potential after several discharges was the same in the ultrahigh vacuum as in the ordinary high vacuum. Except when point electrodes were involved, the dc breakdown potential was proportional to the square root of the gap length. This is in agreement with the hypothesis that the discharge is initiated by transport of electrode material across the gap. This proportionality was observed with steel, silver and copper electrodes, but the actual breakdown potentials were higher with steel and lower with copper than with silver electrodes. Moderate values were found for the pulse factor (ratio of pulsed to dc breakdown potential). For the long ( $9 \times 10^{-8}$  sec) pulses the factor was 1.3 and was independent of gap length. Pulse factors up to 1.7 were observed with the shorter pulses. The relation between breakdown potential and gap length calculated by G.A. Farrall (J. Appl. Phys. 33, 6, 1962) on the hypothesis that the discharge is initiated by transfer of electrode material across the gap, was not confirmed. Sporadic delays up to several

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ACCESSION NR: AP4028955

microseconds were observed, but there was no regularity about these and most of the discharges took place without appreciable delay. Moreover, the relation between gap potential and time was different for delayed discharges from that for undelayed ones. It is concluded that at least two discharge mechanisms are involved. A few exploratory experiments (not described in detail) were performed with very short pulses ( $5 \times 10^{-8}$  sec). Pulse factors up to 4 were observed, and it is suggested that very short pulses should be thoroughly investigated. Orig.art.has: 1 formula and 7 figures.

ASSOCIATION: none

SUBMITTED: 10Aug62

DATE ACQ: 28Apr64

ENCL: 00

SUB CODE: PH

NR REF SOV: 009

OTHER: 009

Cord 3/3

L 19013-65 EWT(1)/EEC(b)-2/EWA(h) Feb SSD/ASD(a)-5/AS(mp)-2/BSO/AFWL/ESD(c)/  
ESD(gs)/ESD(t)

ACCESSION NR: AF4049047

S/0057/64/034/011/2044/2047

AUTHOR: Khudyakova, L.N.; Gutnikova, Yu.K.; Tarasova, L.V.

TITLE: The hard component of the radiation from a pulsed x-ray tube 25 10

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.11, 1964, 2044-2047

TOPIC TAGS: x-ray emission, x-ray tube, pulsed radiation, hard photon contribution, high energy electron

ABSTRACT: The radiation from a pulsed x-ray tube of special design was examined and the presence of an ultrahard component was established; the quantum energy of this component considerably exceeded the maximum to be expected on the basis of the applied potential. The design of the x-ray tube is described in more detail elsewhere (K.B.Zelenskiy, I.A.Troshkin and V.A.Tsukerman, PTE 2, 140, 1963). It consists of a tungsten "needle" anode within and projecting 5 mm beyond a hollow conical cathode which terminates in a cylindrical portion. The electrodes are contained in a 3.5 cm diameter 18 cm long glass tube. The tube is powered by a pulse transformer that delivers 350 kV pulses of 1.5 microsec duration. The breakdown potential of the working gap is approximately 250 kV. The x-rays were investigated by

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L 19013-65

ACCESSION NR: AP4049047

absorption in lead and by means of the Compton recoil tracks in thick nuclear emulsions. The absorption measurements were performed with plastic scintillators and photomultipliers. A complete absorption curve (up to 4 points) was obtained at each pulse. The absorption curves varied considerably from pulse to pulse, and it was found that 30% of the pulses produced photons with energies greater than the 350 kV limit expected on the basis of the potential developed by the pulse transformer. The nuclear emulsions were calibrated with  $\text{Cs}^{137}$  and  $\text{Co}^{60}$   $\gamma$ -rays, passing through 2.2 cm of lead. It was established that the maximum x-ray photon energy was greater than 0.6 MeV and less than 1.3 MeV. By calibrating the emulsions with  $\gamma$ -ray sources of known intensities it was found that the yield of ultrahard x-rays was  $10^8$  to  $10^9$  photon/pulse. This is to be compared with the total estimated x-ray yield of  $10^{11}$  photon/pulse. The mechanism by which the ultrahard x-rays are produced was not investigated, but several tentative suggestions are offered, based on the behavior of the plasma in the vacuum discharge. Orig.art.has: 1 figure.

ASSOCIATION: none

SUBMITTED: 07Feb64

ENCL: 00

SUB CODE: OP

NR REF SOV: 013

OTHER: 001

2/2

ACC NR: AP 001308

SOURCE CODE: UR/0057/66/036/012/2148/2153

AUTHOR: Tarasova, L.V.; Kalinin, V.G.

ORG: none

TITLE: Thermal pulse initiation of high vacuum electric breakdown

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 12, 1966, 2148-2153

TOPIC TAGS: dielectric breakdown, high vacuum, spark gap, heat effect

ABSTRACT: The authors have found that breakdown of a vacuum gap can be initiated by the sudden heating of a filament mounted in the space between the electrodes. There are presented experimental results concerning initiation of vacuum discharge between a 40 mm diameter steel disk and a 5 mm diameter steel rod with rounded edges by sudden heating of a 9 mm long 0.04 to 0.2 mm diameter nickel, tungsten, or nichrome wire mounted midway between the electrodes. The apparatus was continuously pumped with an oil diffusion pump to a pressure of  $10^{-4}$  to  $10^{-5}$  mm Hg; no cold trap was used. The filament was heated by the sudden discharge of a 45  $\mu$ F capacitor charged to 100 to 215 V. The gap lengths are not given; instead, the vacuum breakdown potential in the absence of the triggering thermal pulse is specified. Gaps with untriggered vacuum breakdown potentials up to 70 kV were investigated. Considerable reductions in the breakdown potential were achieved by the triggering device: a gap with a

UDC: 537.521.7

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ACC NR: AP 7001308

normal vacuum breakdown potential of 70 kV could be triggered at potentials as low as 30 kV, and a gap with a normal breakdown potential of 7 kV could be triggered at 0.47 kV. The time delays between triggering pulse and breakdown ranged from a few tens of microseconds to over a hundred microseconds. These long delays limit the possibilities for the practical application of devices (which the authors call "thermotrons") based on thermal pulse initiation of vacuum discharge. Only pulsed heating of the filament would initiate breakdown; continuous heating of the filament did not reduce the breakdown potential of the gap. It is hypothesized the breakdown is triggered by the sudden desorption of gases and vapors adsorbed on the filament. The experimental data are discussed at some length in terms of this hypothesis, which is shown to give a satisfactory account of them. Orig. art. has: 5 figures and 1 table.

SUB CODE: 20 SUBM DATE: 31Dec65 ORIG. REF: 004 OTH REF: 008

Card 2/2

TARASOVA, L. V.

USSR/Chemistry - Fuels

1 Mar 53

"The Isomerization of Cyclohexane Into Cyclopentane in the Presence of Aluminum Chloride Under Hydrogen Pressure," A. F. Plate and L. V. Tarasova, Lab of Org Chem in N. D. Zelinskiy, Moscow State U

DAN SSSR, Vol 89, No 1, pp 77-80

Studied the isomerization of cyclohexane into cyclopentane in the presence of  $AlCl_3$  under H pressure. The temp was 150-250°. If the isomerization is carried out at these conditions, the cracking can

259T3

be kept to a min. At 200° the yield of methylcyclopentane is 69% of the reacted cyclohexane. Presented by Acad B. A. Kazanskiy 22 Dec 52.

86503

S/079/60/030/011/009/026  
B001/B066

5.2700

1273, 1282, 2209

AUTHORS:

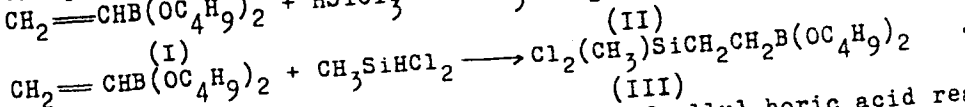
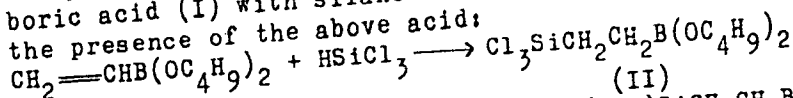
Mikhaylov, B. M., Aronovich, P. M., and Tarasova, L. V.

TITLE:

Organoboron Compounds. LXIV. Reaction of Esters of Unsaturated Organoboric Acids With Silane Chlorides

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 11, pp.3624-3628

TEXT: The authors used the addition reaction of silane chlorides to unsaturated compounds in the presence of platinum hydrochloric acid, which had been developed in the papers of Refs.1-3, and obtained in the present study the esters (II) and (III) by reaction of isobutyl ester of vinyl boric acid (I) with silane trichloride or methyl-silane dichloride in the presence of the above acid:



In the same way, also the n-butyl ester of allyl boric acid reacts with

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Organoboron Compounds. LXIV. Reaction of  
Esters of Unsaturated Organoboric Acids With  
Silane Chlorides

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B001/B066

methyl-silane dichloride. According to the data of Refs.1-3, the silyl-trichloride and methyl-silyl dichloride groups add to the terminal carbon atoms. This addition takes place under milder conditions than it is the case in olefins, but it is impossible without a catalyst. In the presence of platinum hydrochloric acid, the addition of triethyl silane to the ester of allyl boric acid is far more difficult. The addition of both silanes to the esters is accompanied by side reactions which render the purification of the reaction products difficult. This applies particularly to the reaction of silane trichloride with the butyl ester of allyl boric acid. A mixture of products resulted in this reaction from which a fraction was separated which contained more chlorine than corresponds to the expected ester. Even under milder conditions no satisfactory result could be obtained. On the basis of the results obtained in the paper of Ref.4, the authors tried to carry out the addition of silane trichloride and methyl-silane dichloride to (I) and to the butyl ester of allyl boric acid under  $\gamma$ -irradiation. Complicated compounds resulted in this connection. After repeated distillation, a fraction was separated from the reaction products of the butyl ester of allyl boric acid with silane

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Organoboron Compounds. LXIV. Reaction of  
Esters of Unsaturated Organoboric Acids With  
Silane Chlorides

S/079/60/030/011/009/026  
B001/B066

trichloride, which also contained more chlorine than the ester  $\text{Cl}_3\text{Si}(\text{CH}_2)_3\text{B}(\text{OC}_4\text{H}_9)$ . The formation of products with higher chlorine quantities on reaction of the ester of allyl boric acid with silane trichloride in the two above-mentioned cases suggests that not only double bonds but also ester groupings play a role in the reactions of esters of unsaturated organoboric acids. To check this assumption, the following reactions were carried out: the n-butyl ester of n-propyl boric acid was reacted with silane trichloride on heating, and gave the n-butyl ester of n-propyl-chloro-boric acid and other products not identified. There are 7 references: 4 Soviet and 3 US.

ASSOCIATION: Institut organicheskoy khimii Akademii nauk SSSR (Institute of Organic Chemistry of the Academy of Sciences USSR)

SUBMITTED: January 3, 1960

Card 3/3

L 39441-65 EPF(c)/EPR/EMP(j)/EWT(m) Pc-l/Pr-l/Ps-l RPL RM/WW  
S/0020/65/160/003/0615/0618

ACCESSION NR: AP5005892

AUTHORS: Mikhaylov, B. M.; Kozminskaya, T. K.; Tarasova, L. V.

3-  
21  
B

TITLE: Polymethylene-bis-(alkylamino)-boronium salts and 1-alkylamino-boracycloalkanes

SOURCE: AN SSSR. Doklady, v. 160, no. 3, 1965, 615-618

TOPIC TAGS: boron organic compound, alkane, monomer, polymer

ABSTRACT: The authors have studied the derivative cyclic compounds of boron relative to the tendency to convert to boronium salts. They investigated 1-chlorboracyclopentane, 1-chlorboracycloheptane, and 1-n-butylmercaptoboracyclopentane. It is shown that the chlorides of borocyclic compounds are changed, like noncyclic boron-organic halides, when acted on by amines, to polymethylene-bis-(alkylamino)-boronium salts or to decomposition products--alkylaminoboracycloalkanes; or they simultaneously form both compounds. The process may move in either direction, and the ratio of the reaction products is determined chiefly by the nature of the amine. It is affected to a lesser degree by the nature of the boron-

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L 39441-65

ACCESSION NR: AP5005892

organic compound. When methylamine or ethylamine interact with 1-chloroboracyclopentane, a single course of reaction is observed toward the formation of the boronium salt tetramethyl-bis(alkylamine)-boronium chloride. With increase in the alkyl radical in the amine, the yield of the decomposition product indicated above rises. The size of the boron-organic ring affects the course of the reaction. 1-alkylaminoboracycloheptane is a colorless, freely moving liquid, substantially in monomeric form. 1-alkylaminoboracyclopentane, on the contrary, tends to polymerize. The authors outlined their experimental procedures, listed the products obtained, and designated many of the physical properties. Original article has 4 formulas and 1 table.

ASSOCIATION: Institut organicheskoy khimii im. N.D. Zelinskogo Akademii nauk  
SSSR (Institute of Organic Chemistry of the Academy of Sciences, SSSR)  
SUBMITTED: 02Jul64 ENCL: 00 SUB CODE: 00

NO REF SOV: 011

OTHER: 002

Card 2/2 110

KURNOSOVA, N.A.; BONDARENKO, V.A.; RAKHMAN, E.Z.; YAVRUMOV, V.A.; KIRYUSHINA, L.A.; MANOLOVA, E.P.; ESSEL', A.Ye.; TARASOVA, M.A.; PIROGOVA, A.I.; PIROGOV, I.Ya.; AKOPYAN, R.A.; BABUNASHVILI, N.P.; PROTSENKO, O.A.; PUNSKAYA, I.G.; BURMISTROVA, O.G.; POGOREL'SKAYA, S.A.; D'YACHENKO, T.F.; TOPURIYA, I.I.; MATABELI, G.V.; GIGITASHVILI, M.S.; VACHNADZE, T.G.; MAZURIN, N.D.; NABIYEV, E.G.; BLOKHOV, V.P.

Abstracts. Zhur. mikrobiol., epid. i immun. 41 no.4:142-147  
Ap '64. (MIRA 18:4)

1. Moskovskiy institut epidemiologii i mikrobiologii (for Kurnosova).
2. Faleshtskaya rayonnaya bol'nitsa Moldavskoy SSR i Vinnitskiy meditsinskiy institut imeni Pirogova (for Bondarenko).
3. Stavropol'skiy institut vektsin i syvorotok (for Rakhman).
4. Kaluzhskiy oblastnoy otde'l zdravookhraneniya (for Yavrumov, Kiryushina).
5. Donetskii meditsinskiy institut (for Manolova).
6. Tbilisskaya rayonnaya imeni 26 komissaro sanitarno-epidemiologicheskaya stantsiya (for Akopyan, Babunashvili).
7. Kemerovskiy meditsinskiy institut (for Protsenko).
8. Turkmenkovskiy institut epidemiologii i mikrobiologii i Gor'kovskaya rayonnaya sanitarno-epidemiologicheskaya stantsiya (for Pogorel'skaya, D'yachenko).
9. Institut meditsinskoy parazitologii i tropicheskoy meditsiny imeni Virsaladze Ministerstva zdravookhraneniya Gruzinskoy SSR (for Topuriya, Matabeli, Gigitashvili, Vachnadze).
10. Kazanskiy institut usovershenstvovaniya vrachey (for Nabiyeu).

TARASOVA, M.G.

New method for producing oil of henbane. Med. prom. 13 no.2:25-27  
F '59 (MIRA 12:3)

1. Leningradskiy khimiko-farmatsevticheskij institut.  
(HYOSCYAMUS)

TARASOVA, M.G.

Selection of the most sensitive reagent for qualitative testing of cardiac glucosides. Trudy Len. khim.-farm. inst. no.14: 41-44 '62 (MIRA 17:2)

Determination of the optical density of cardiac glucosides in photocolormetry. Ibid.:45-50

Comparison of the results of biological and photocolormetric methods of evaluating isolated cardiac glucosides. Ibid.:51-59

Effect of cardiac glucoside mixtures on the biological activity and the results of photocolormetric testing. Ibid.: 60-64

Comparison of the results of biological and photocolormetric testing of plant raw material half-finished products, preparations and production wastes containing cardiac glucosides. Ibid.:65-73

L 13082-66 EWT(m)/EWP(j)/T RM  
ACC NR: AP6002215 (A) SOURCE CODE: UR/0080/65/038/012/2740/2744  
AUTHOR: Andreyeva, I. V.; Koton, M. M.; Getmanchuk, Yu. P.; Tarasova, M. G. 38  
ORG: Institute of High Molecular Compounds, AN SSSR (Institut vysokomolekulyarnykh soedineniy AN SSSR) B  
TITLE: Emulsion polymerization of methacrolein 1  
SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 12, 1965, 2740-2744  
TOPIC TAGS: emulsion polymerization, methacrolein, catalytic polymerization, high polymer, polymer, acrylic plastic  
ABSTRACT: Emulsion polymerization of methacrolein was studied in the presence of potassium persulfate and silver nitrate with a solution of polyacrolein bisulfite as a specific emulsifier. The object of the work was to develop a process for making a soluble polymer with high molecular weight containing reactive aldehyde groups. The optimum ratio of the monomer to water is 1:8 and the optimum polymerization temperature is 50° C. In all experiments the emulsifier content was constant (5 wt % based on the monomer). The amount of the initiator varied but the ratio of silver nitrate  
UDC: 678.744  
Cord 1/3



L 13082-66

ACC NR: AP6002215

activator to potassium persulfate oxidative agent was 10:1. The oxygen content in the inert gas was  $0.05 \cdot 10^{-2}$  to  $2 \cdot 10^{-2}$  %. The characteristic viscosity of polyacrolein product increased with increasing depth of polymerization. Presence of aldehyde groups in the polymer product permits further processing into new types of plastic sheets or resin fibers. The dependence of polyacrolein characteristic viscosity upon polymerization duration is shown in Fig. 1. The effect of pH upon polymer characteristic viscosity  $\eta$  is shown in Fig. 2. It was found that the lower the oxygen and propionic aldehyde contaminant content, the higher was the polyacrolein molecular weight. Orig. art. has: 3 figures and 2 tables.

SUB CODE: 07,14/ SUBM DATE: 05Nov64/ ORIG REF: 004/ OTH REF: 002

Card 2/3

L 13082-66  
ACC NR: AP6002215

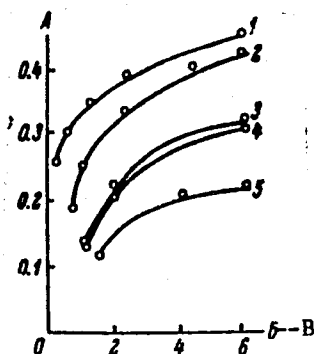


Fig. 1. Polyacrolein characteristic viscosity  $\eta$  as a function of polymerization duration. A - characteristic viscosity  $\eta$ ; B - is polymerization duration in hours; the ratio of  $K_2S_2O_8$  to  $AgNO_3$  in mole %; 1 - 0.6:0.06; 2 - 0.6:0.06 (in presence of a buffer), 3 and 4 - 1.3:0.13; 5 - 2.6:

Q.267.  
Card 3/3

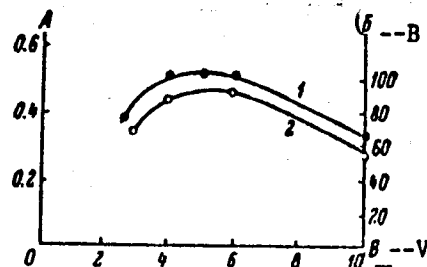


Fig. 2. The effect of solution pH on polyacrolein characteristic viscosity  $\eta$  and polymer yield for 6 hr polymerization and  $K_2S_2O_8:AgNO_3$  ratio of 0.6:0.06 mole %.

A -  $\eta$ ; B - percent conversion; V - initial solution pH; 1 - polyacrolein yield in percent; 2 - polymer characteristic viscosity  $\eta$ .

TARASOVA, M.I.

What we saw in the pharmaceutical institutions of Kharkov and Kiev.  
Apt. delo 11 no.2:55-57 Mr-Ap '62. (MIRA 15:5)

1.Volgogradskoye oblastnoye aptechnoye upravleniye.  
(KHARKOV--PHARMACY) (KIEV--PHARMACY)

TARASOVA, M.I.

Drugstore organization in Volgograd province. Apt. delo 17  
no.4:37-40 Ji-Ap 166. (MIRA 17:1

1. Apteknoye upravleniye Volgogradskoy oblasti.

CHERNYSHEV, M.P.; ROZHKOVA, L.P.; SHUL'GINA, Ye.F.; IGNATOVICH, A.F.;  
LABUNSKAYA, L.S.; FOMINA, T.V.; CHERNYAKOVA, A.P.; SHAPAKOVA,  
L.N.; TARASOVA, M.K.; ANFILATOVA, A.I.; SLAVIN, L.B.;  
BARYSHEVSKAYA, G.I.; DERIGLAZOVA, N.V.; MATUSHEVSKIY, G.V.;  
AL'TMAN, E.N.; KROPACHEV, L.N.; CHEREDILOV, B.F.; POTAPOV,  
A.T.; DUDCHIK, M.K.; REGENTOVSKIY, V.S.; YERMAKOVA, L.F.;  
SEMEANOVA, Ye.A.; KULIKOVSKIY, I.I.; KIRYUKHIN, V.G.; AKSENOV,  
A.A., red.; NEDOSHIVINA, T.G., red.; SERGEYEV, A.N., tekhn.  
red.; BRAYNINA, M.I., tekhn. red.

[Hydrometeorological handbook of the Sea of Azov] Gidrometeorologicheskii spravochnik Azovskogo moria. Pod red. A.A.Aksenova. Leningrad, Gidrometeoizdat, 1962. 855 p. (MIRA 16:7)

1. Gidrometeorologicheskaya observatoriya Chernogo i Azovskogo morey.

(Azov, Sea of--Hydrometeorology)

ORLOVA, G.A. [Orlova, H.A.]; CHERKASOVA, L.I.; SHESTERIKOVA, O.I.; SERGEYEVA, M.M.; TARASOVA, M.Kh.; KARUNSKIY, V.G. [Karuns'kyi, V.H.]; MISHINA, Z.D.; ~~LEBNEVA, T.V.~~; ROZDIALOVSKIY, B.V. [Rozdialovs'kyi, B.V.]; DYMSHITS, L.S.; ZAYTSEV, A.B., glavnyy red.; SERGEYEV, N., otv. za vypusk; SERGEYEV, M.F., red.; BERGER, F., tekhn.red.

[Economy of Volyn' Province; a statistical manual] Narodne hospodarstvo Volyns'koi oblasti; statystychnyi zbirnyk. L'viv, Derzhstatvydav, 1958. 211 p. (MIRA 12:12)

1. Volyn' (Province) Statystychne upravlinnia. 2. Statisticheskoye upravleniye Volynskoy oblasti (for all, except Sergeyev, N., Sergeyev, M.F.) 3. Nachal'nik Statisticheskogo upravleniya Volynskoy oblasti (for Zaytsev).

(Volyn' Province--Statistics)

GOLIK, N.I., prof.; CHERNYSHEVA, L.N.; TARASOVA, M.M.; SAMSONOVA, Z.V.;  
KOTNEVA, V.M.; MOGIL'NAYA, V.Z.

Analysis of clinical and pathomorphological materials on multiple  
sclerosis from 1946 to 1957. Sbor. trud. Kursk. gos. med. inst.  
no.13:258-262 '58. (MIRA 14:3)

1. Iz kliniki nervnykh bolezney (zav. - prof. N.I.Golik) Kurskogo  
gosudarstvennogo meditsinskogo instituta.  
(MULTIPLE SCLEROSIS)

KOVALENKO, K.N.; TARASOVA, M.N.

Physicochemical investigation of the interaction between thorium  
nitrate and phenylacetic acid. Zhur.neorg.khim. 5 no.2:385-392  
P '60. (MIRA 13:6)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.  
(Thorium nitrate) (Acetic acid)



TARASOVA, M. P.

Dissertation: "Water Absorption and Moisture Permeability of Slightly Polar and Polar Insulating Materials and the Effect of Water Absorption on Their Electrical Properties." Cand Tech Sci, Leningrad Polytechnic Inst, Leningrad, 1953. (Referativnyy Zhurnal--Fizika--Moscow, Apr 54)

SO: SUM 243, 19 Oct 1954

USSR.

✓Determination of diffusion coefficient, moisture permeability, and solubility [of polymers] by the dynamic sorption method. M. M. Mikhailov and M. P. Tarasova. *Zhur. Tekh. Fiz.* 24, 1957-65(1954).—A series of equations was derived for calcn. of the diffusion coeff. ( $D$ ) by the new method for polymers that either obey or disobey Henry's law. The moisture permeability coeff. ( $P$ ) for polymers in an atm. of high relative humidity is expressed as  $P = kD$ , where  $k$  is the soly. coeff. of water vapor. By this method, unlike the sorption method, the gain in wt. of the polymer at equil. need not be detd., and the measurements can be made in samples several cm. thick and in a much shorter time. In comparison with the method based on the pressure changes, the dynamic sorption method permits use of simpler app. Results of the measurements of polystyrene, polymethyl methacrylate, polyurethane, and 8 resins of undisclosed compn. by the above-mentioned 3 methods agreed well. This paper is an outgrowth of the book by M. (*Electromaterialovedenie*, 1953) to which references are made for the description of the app. and other details.

A. P. Kotloby

TARASOVA, M.P.

TARASOVA, M.P.

Source poisoning by potassium dichromate. Trudy Inst. im.  
N.V. Sukhar. 5 no. 2: 201-205 '66.

Information to authorities. 1966. 209-211

(MIRA 1846)

TARASOVA, M.P., kand.tekhn.nauk, dotsent

Use of moisture constants for determining the moisture characteristics of organic electric insulating materials. Izv. vys. ucheb. zav.; energ. 6 no.7:43-48 J1 '63. (MIRA 16#8)

1. Leningradskiy politekhnicheskoy institut imeni M.I.Kalinina.  
Predstavlena kafedroy elektroizolyatsionnoy i kabel'noy tekhniki.  
(Electric insulators and insulation)

CHEREYSKAYA, N.N.; TARASOVA, M.Ye.

Application of mathematical methods in schedule planning of chemical plant operations. Khim. proc. no.10:725-731 O '63.

(MIRA 17:6)

1. Moskovskiy inzhenerno-ekonomicheskiy institut imeni Ordzhonikidze.

L 22727-66

ACC NR: AP6002925

SOURCE CODE: UR/0286/65/000/024/0086/0086

AUTHORS: Anisimov, O. L.; Borodin, M. D.; Pozdneva, T. V.; Chizhikov, Yu. V.;  
Tarasova, N. A.; Cherkinskiy, B. Z. 21  
B

ORG: none

TITLE: Method for hermetically sealing interference light filters. Class 42, No. 177115

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 86

TOPIC TAGS: interference filter, light interference

ABSTRACT: This Author Certificate presents a method for hermetically sealing interference light filters prepared by depositing an interference film which is then covered with a blank backing with subsequent smearing of the ends with sealing and water-insulating coatings. To protect the interference film of the light filter from moisture, a film, e.g., butaphol, is placed between the interference film and the blank backing. The light filter is then pressurized at increased temperature and pressure until the film is cemented to the backing over all surfaces of the light filter. 1

SUB CODE: 20/ SUBM DATE: 03Oct64

Card 1/1 128

UDC: 535.345.67 2

IVANOVA, Ye.P., starshiy nauchnyy sotr.; ZERNOV, Ye.V., преподаvatel';  
KIRSANOVA, G.A., nauchnyy sotr.; NOVIKOVA, N.D., nauchnyy sotr.;  
TARASOVA, N.D.; RISHINA, R.G., starshiy inzh.; LEVINSKIY, V.B.,  
red.; SHPAK, Ye.G., tekhn. red.

[Work organization and establishing technical standards in enterprises manufacturing synthetic fibers] Organizatsiia truda i tekhnicheskoe normirovanie na predpriyatiyakh khimicheskikh volokon. By E.P.Ivanova i dr. Moskva, Gos. nauchno-tekhn.izd-vo khim. lit-ry, 1961. 175 p. (MIRA 15:1)

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(Textile fibers, Synthetic—Production standards)

MIRSKOVA, V.N.; STARKOVA, G.A.; VOYUTSKAYA, M.I.; TARASOVA, N.I.; TRET'YAKOVA, K.S.

Use of a reduced dose of pepsin in the purification and concentration of sera by means of the Diaferm-3 method. Zhur. mikrobiol. epid i immun. 31 no.6:116 Je '60. (MIRA 13:8)

1. Iz Permskogo instituta vaktsin i sывorotok.  
(PEPSIN) (SERUM)



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K.I.; RAYKHER, I.I.

Study of antitoxin losses in the purification and concentration  
of sera by the diapherm-3 method. Zhur.mikrobiol.epid.i immun.  
31 no.8:139-141 Ag '60. (MIRA 14:6)

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L 16867-63

EWI(1)/BDS/EEC(b)-2 AFFTC/ASD/SSD P1-4

ACCESSION NR: AR3006307

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SOURCE: RZh. Fizika, Abs. 7D583

60

AUTHOR: Ivanova, N.I.; Tarasova, N.I.; Zhukovskiy, A.P.

TITLE: Possibility of existence of luminescence centers of the complex type in alkali-halide phosphors 21

CITED SOURCE: Sb. Fiz. shchelochno-galoidn. kristallov. Riga, 1962, 149-155. Diskus., 155

TOPIC TAGS: phosphor , alkali-halide crystal , luminescence center , KCl-Tl, NaCl-Tl, KCl-Pb, NaCl-Ag

TRANSLATION: The luminescence of the phosphors KCl-Tl, Na-Tl, KCl-Pb and NaCl-Ag, which contain impurities of two-charge kations (Ca, Sr, Ba, Cd) in various concentrations has been investigated with an aim toward studying the influence of microdefects on luminescence

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centers. The change in the luminescence spectra in several phosphors with mixed bases (NaCl-KCl, KCl-KBr, KCl-RbCl, activated with Tl, and NaCl-KCl-Ag) was also investigated. The authors have arrived at the conclusion, on the basis of the obtained results, that the luminescence centers for the investigated systems represent complexes included in the crystal of the base in the form of an adsorption inclusion, with conservation of the intrinsic coordination; the ions of the activator, on the other hand, which are included in the base in the form of a solid substitutional solution, are not responsible for the radiation. Bibliography, 16 titles. T. Eksina.

DATE ACQ: 15Aug63

SUB CODE: PH

ENCL: 00

Card 2/2

TARASOVA, N. M.

14 14798

USSR/Chemistry - Systems, Ternary  
Chemistry - Fusibility

Sep 1947

"The Fusibility of the Ternary System  $\text{CdCl}_2$ - $\text{KCl}$ - $\text{PbCl}_2$ ," N. M. Tarasova, 16 pp

"Zhur Fiz Khim" Vol XXI, No 4 - p.487-502

Detailed presentation of experimental data, chiefly by tables and charts. The surface of a liquid ternary system is studied by thermic analysis. Seven fields of crystallization are discovered, of which three are fields of pure components, and four are fields of double compounds. No ternary compounds were discovered in the system.

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